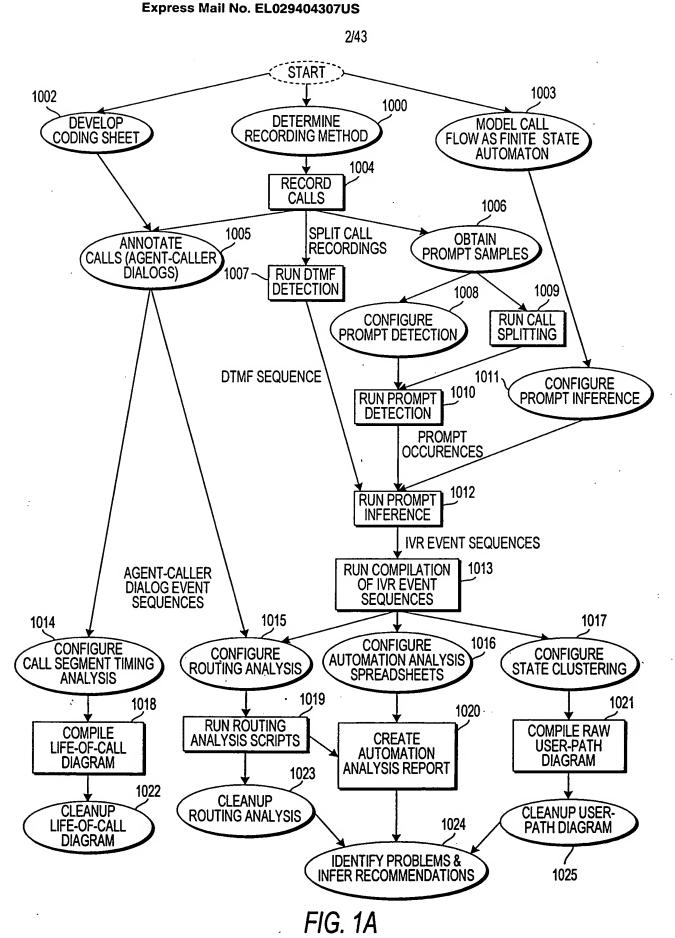
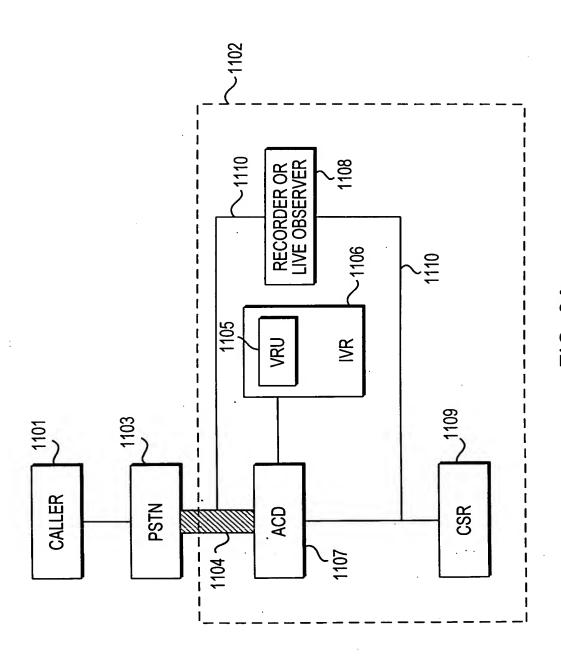


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PER MANCE OF AN AUTOMATED RESPONS
SYSTEM
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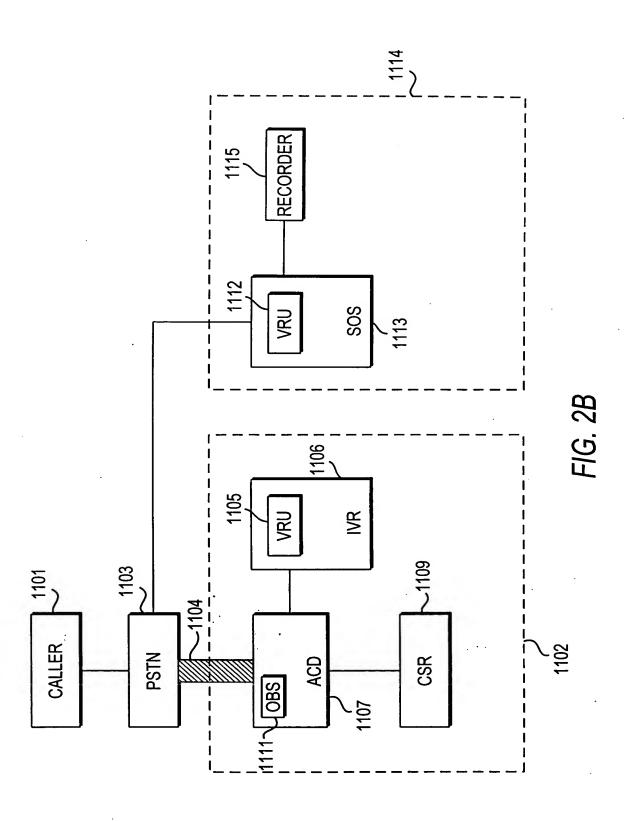
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PETERMANCE OF AN AUTOMATED RESPONSYSTEM
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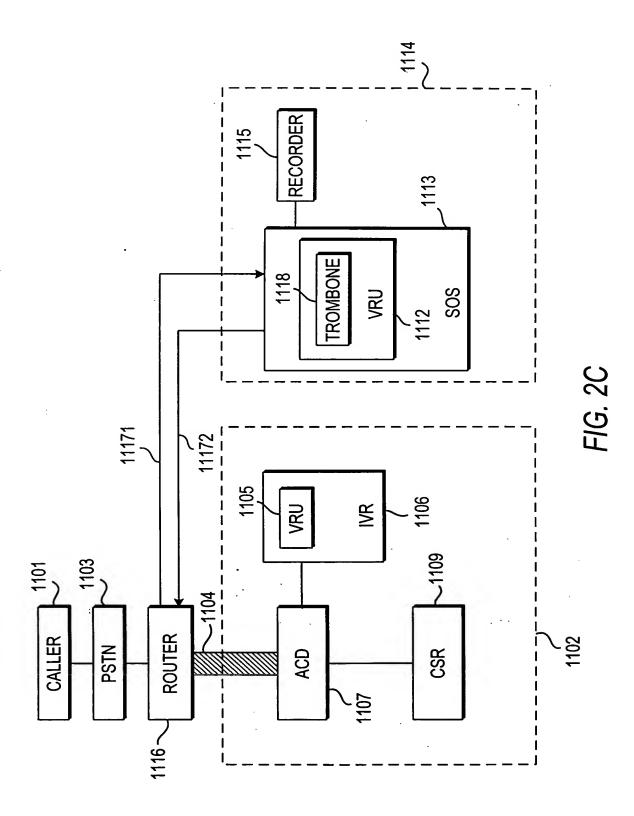
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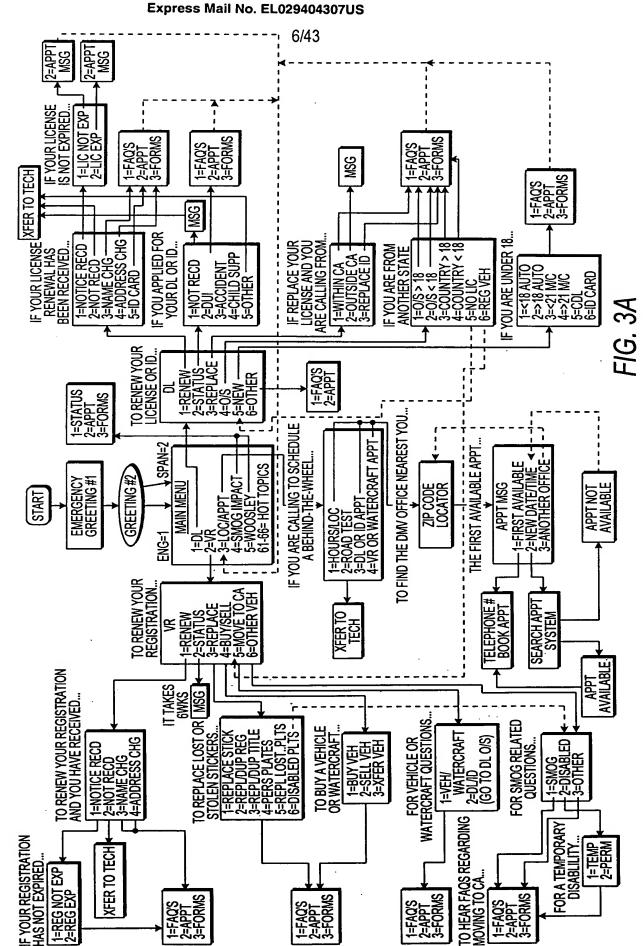
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PER MANCE OF AN AUTOMATED RESPON
SYSTEM

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PER PROPERTY OF AN AUTOMATED RESPONSYSTEM



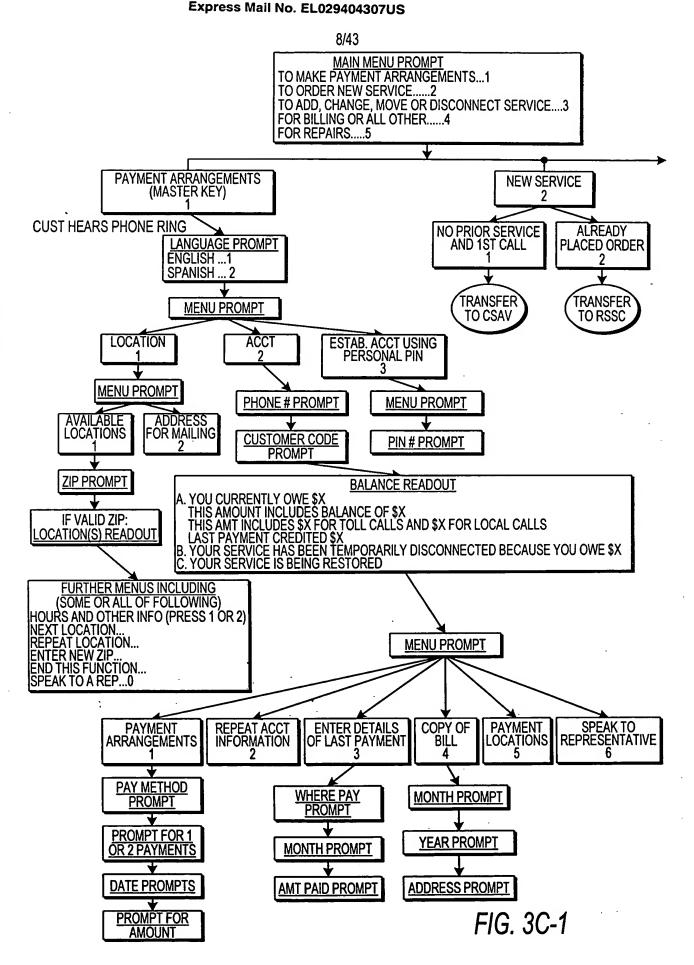
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APT ATUS AND METHOD FOR MONITORING
PEL RMANCE OF AN AUTOMATED RESPONSE
SYSTEM
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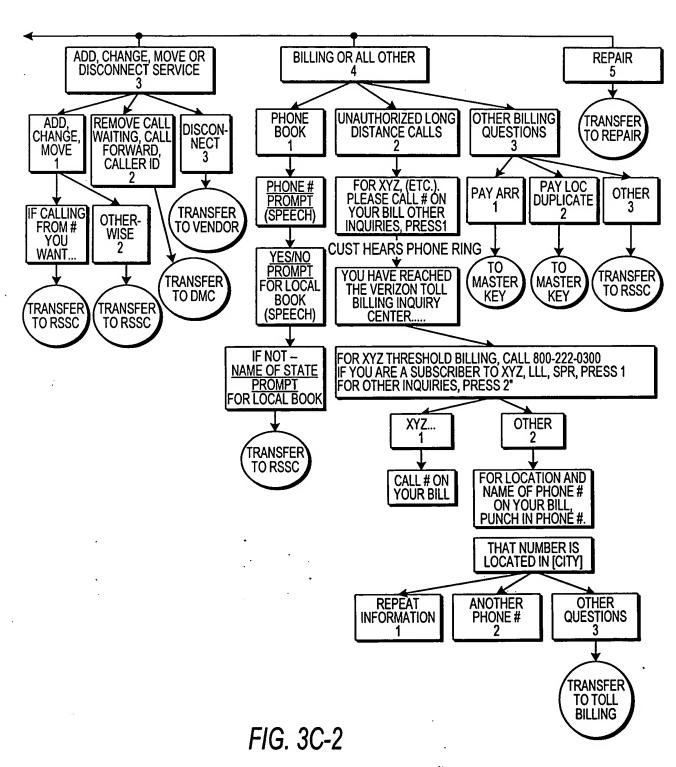
FIG. 3C-1 FIG. 3C-2

FIG. 3B

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APPARATUS AND METHOD FOR MONITORING
ORMANCE OF AN AUTOMATED RESP



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PER MANCE OF AN AUTOMATED RESPONS
SYSTEM
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PER MANCE OF AN AUTOMATED RESPONS
SYSTEM
Express Mail No. EL029404307US

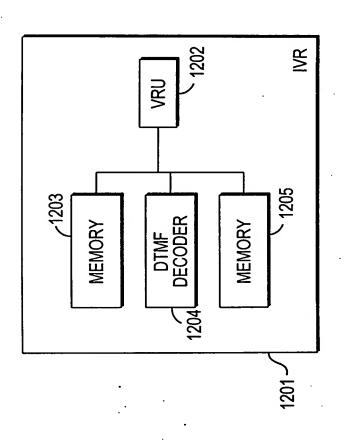


FIG. 3L

STATE	TIME	OUTCOME
CALL ARRIVAL	##:##:##	DATE; CALLER IDENTIFICATION
INITIAL MENU	##:##:##	TOUCH TONE SELECTION, E.G., 3
TELEPHONE NUMBER PROMPT	##:##:##	TOUCH TONE NUMBERS PRESSED, E.G., 617-555-1212
VALIDATE TELEPHONE NUMBER	##:##:##	INVALID NUMBER
TELEPHONE NUMBER RE-PROMPT	##:##:##	TOUCH TONE NUMBERS PRESSED
VALIDATE TELEPHONE NUMBER	##:##:##	VALID NUMBER
MENU 1	##:##:##	TOUCH TONE SELECTION
QUERY A	##:##:##	TOUCH TONE NUMBERS PRESSED
QUERY B	##:##:##	TOUCH TONE NUMBERS PRESSED
MENU 2	##:##:##	TOUCH TONE SELECTION
TRANSFER TO AGENT	##:##:##	TRANSFER QUEUE (CALLER ON HOLD)
IVR END	##:##:##	TRANSFER COMPLETED

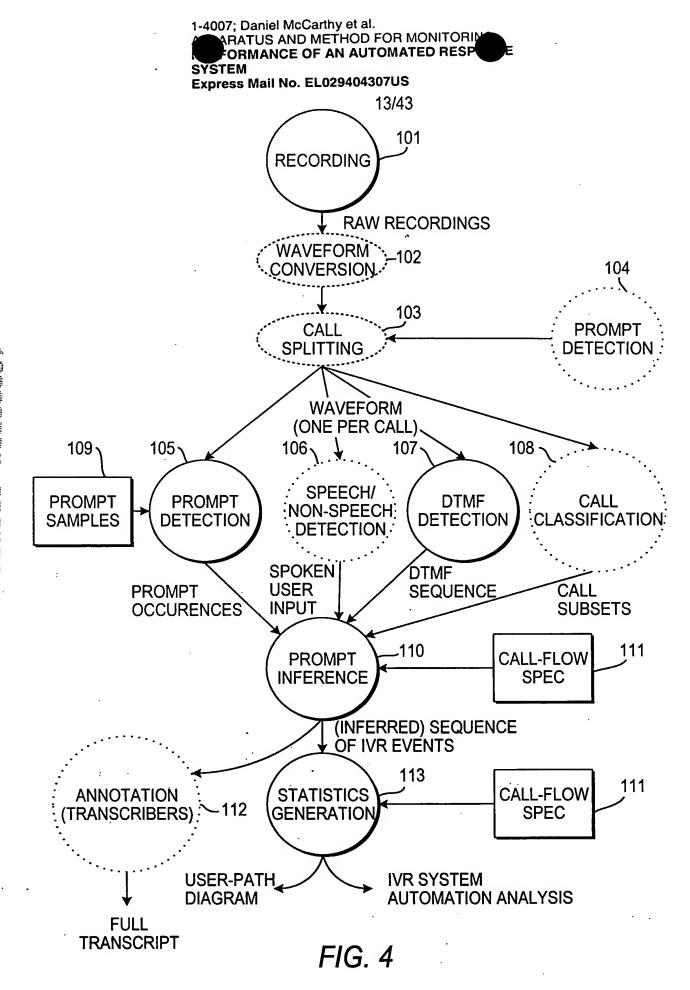
FIG. 3E

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PERFORMANCE OF AN AUTOMATED RESPONSE
SYSTEM
Express Mail No. EL029404307US

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	TIME	STATE	OUTCOME
井	#,##	CALL ARRIVAL	DATE
#	##'##	INITIAL MENU	TOUCH TONE SELECTION
#	#,##,##	ACCOUNT NO. PROMPT	TOUCH TONE NUMBERS PRESSED
#=	##,##	VALIDATE NUMBER	INVALID
#=	##'##	ACCOUNT NO. RE-PROMPT	ACCOUNT NO. RE-PROMPT CALL TERMINATED BY CALLER
#=	##'##	CALL ARRIVAL	DATE
#=	## '##	INITIAL MENU	TOUCH TONE SELECTION
#	##'##	ACCOUNT NO. PROMPT	TOUCH TONE NUMBERS PRESSED
#	##'##	VALIDATE NUMBER	VALID
##	##'##	MENU 1	TOUCH TONE SELECTION
#	##'##	TRANSFER TO AGENT	TRANSFER COMPLETED
#	##'##	CALL ARRIVAL	DATE
		•••	•••
##	##'##	ACCOUNT BALANCE	INFORMATION DELIVERED
##	##'##	MENU 3	TOUCH TONE ELECTION
44	##'##	TRANSFER TO AGENT	TRANSFER QUEUE (CALLER ON HOLD)
#	##,##	IVR END	CALL TERMINATED BY CALLER

FIG. 3F

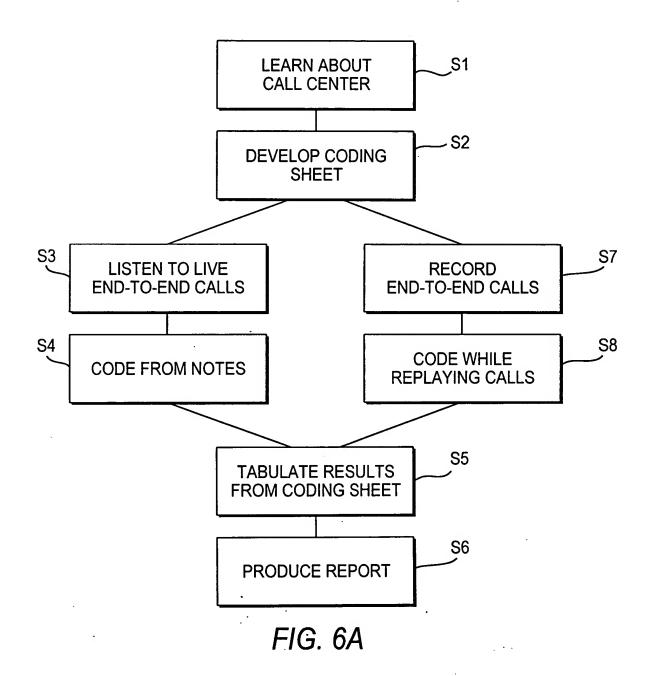


APPARATUS AND METHOD FOR MONITORING PER MANCE OF AN AUTOMATED RESPON

SYSTEM

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AF CARTUS AND METHOD FOR MONITORING PEOPRISON AUTOMATED RESPONSYSTEM
Express Mail No. EL029404307US

FIG. 6B

FIG. 6B-1
FIG. 6B-2
FIG. 6B-3
FIG. 6B-4

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APPARATUS AND METHOD FOR MONITORING
PEPARAMANCE OF AN AUTOMATED RESPONS
SYS
Express Mail No. EL029404307US

CALL NUMBER	0	38	53	ফ্র	M-10	M-33	M-71	M-130		M-215
TRANSCRIBER DATE:	12/14/1996	—\ <u>▼</u> k	12/19/1996		WOW	WICH	WILLIAM		WUW	VIO VOSACOS
PHONE #:	- 7	2121234567	201123456/	914123456/	9/3123456/ M	918123456/	/3212345b/	516123456/ F	202123436/ /18123436/	/1812,456/
SEX OF CALLER:	1.58 PM	12:03 PM	2:40 PM	2:21 PM	12:41 PM	14:50:41	14:30:57	9:46:48	10:21	12:01:11
NOF INTERACT			12	10	4	0		4		33
DURATION OF ENTIRE CALL (WHOLE MIN)		9	12	=	<u> </u>	me	me	12	88	50
STES TES	0		9,	⊃ ▼	0 1	20	-	0		2
ALL INVOLVE AN AGEN		_	U			00		-0		
DEBUG MAD PHAMADY, MICHII PUDICES		3.1	31	4 0 INVALID	TBILLING OTHER	ADD/CHANGE	REPAIR	NEW 0	NEW	BILLING, OTHER
IVE SUMMART: (MENO CHOICES)				1	THER	ADD/CHAN(INPUT NUMBER	2,2	THER
"HANG UP" "ROTARY"	ANG UP	RING		3	4, 3, 3	3, 1, 973-622-3	2-3626			4, 3, 3
DID CALLER TRY 0 AND FAIL?	0		0	, c	0	2	0		0 4	
WAS CALL INCOMPLETE (0 FUNCTIONS?)	0			2	2		2	2	2	
(IF 1, INDICATE WHICH ONE APPLIES)										
SIAKI OF IVE KINGING OR										
ABANDON A L PHONE # PROMPI										
ABANDON AT OTHER PROMPT										
ARANDON WHII F RINGING FOR AGENT										
ARANDON AT "ALL OUR AGENTS ARE CURRENTLY"						-				
ABANDON AT FAST BUSY OR SYSTEM BUG										
UNUSUALLY HEAVY CALL VOLUMES										
WHERE IN IVR DID THEY ABANDON										
1 MASTERKEY										
2 NEW SERVICE						-				
3 ADD/CHANGE	-									
4 BILLING/OTHEK		.								
J KETAIK JIE TAI I ED GOT TO AN AGENT HOW?										
RV ROTARY PHONE (0 TONES PRESSED)?										
BY ALITO TRANSFER BASED ON PHONE NUMBER?										
THROUGH INTRODUCTION BY PREVIOUS AGENT?										
IN IVE THROUGH INVALID/TIMEOUT?								•		
IN IVR. THROUGH A VALID NONZERO TRANSFER?	0		-	-	-	9	0	0		
BY PRESSING "0"										
OTHER (DIDN'T CATCH IT)										
INDICATE MENU CHOICES MADE IN IVR										
(1. PAY ARRANGEMENTS (MASIER KEY)										
2-1 ORDER NEW SERVICE (WELCOWIE CENTLEY)										

FIG. 68-

SYSTEM Express Mail No. EL029404307US 18/43



18/43
SON CHECKING SON CHECKING SISTEMENT ACCESS AND PETEL HAVE THE CALLS.
SSIGNED SVC
LEASING A PHONE COSTS MONEY WORRIED THAT SHE THREWA PHONE OUT AND SOMEONE IS USING A PHONE LEASING A BILL FOR IT, PHONE LEASING. THANSFERRED TO XYZ LEASING. THANSFERRED TO XYZ LEASING. WIO HAVING REALISED THAT PHONE IS NOT CONNECTED TO NUMBER AND SHES NOT GETTING BILLED FOR OTHER CALLS.
CALLER THOUGHT IT WAS A VOICE-RECO SYSTEM AND WHEN SYSTEM AND WHEN NUMBER, SPOKE HONE NUMBER, SPOKE HONE NUMBER, SPOKE SCHEDILED AN APPT TOMORROW. 100000000000000000000000000000000000
RECEIVED VZ CUST. AND JUST WANTS TING CUST. BLOCK TELEMAKETING TELEMAKETING TELEMAKETING TELEMAKETING TELEMAKETING TELEMAKETING TELEMAKETING O O O O O
CUSTOMER WITH XYZ WANTS TO SWITCH TO
ANGRY LAND- CORTICALLING FOR TENANTER FOR TENANT IN APT 3 WAS WIN TRANSFER WAS WIN TO APT 4 MOVING TO APT 4 MOVING TO APT 4 MOVING TO APT 3 MOVING TO APT 4 MINUTES.
MANUTARY OF THE REST OF THE RE
2-2 NEW SERVICE - FOLLOW-UP 3-1 ADD/ADD 3-2 ADD/ADD 3-3 DISCONNECT 4-1 BILLING/DHER/DAY/MASTER K 4-3-2 BILLING/OTHER/DAY/MASTER KEY 4-3-2 BILLING/OTHER/DAY/MASTER KEY 4-3-3 BILLING/OTHER/OTHER 5 REPAIR (REPAIR CENTER) 1-2 (SPANISH) 1-2 (SPANISH) 1-2 (SPANISH) 1-2 (SPANISH) 1-3 (SPANISH) 1-4 (SPANISH) 1-5 (SPANISH) 1-5 (SPANISH) 1-6 (STABLISH ACCE USING PIN PAYMENT CENTER HOURS PAYMENT ARRANGEMENTS COULD THIS HAVE BEEN DONE IN MK/TB 1-6 (SENT CENTER HOURS) PAYMENT CENTER HOURS PAYMENT ARRANGEMENTS ENTER DETAILS OF LAST PAYMENT COPY OF BILL ACCOUNT INFORMATION ESTABLISH ACCT USING PIN PAYMENT ARRANGEMENTS ENTER DETAILS OF LAST PAYMENT COPY OF BILL II AGENT DO POTENTIALLY AUTO FUNCTIONS? ENTER DETAILS OF LAST PAYMENT COPY OF BILL II AGENT DO POTENTIALLY AUTO FUNCTIONS? ENTER DETAILS OF LAST PAYMENT COPY OF BILL II AGENT DO POTENTIALLY AUTO FUNCTIONS?

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APPARATUS AND METHOD FOR MONITORING
PERMANCE OF AN AUTOMATED RESPONSIVE M
Express Mail No. EL029404307US
19/43

IINDICATE WHICH ONESI
REQUEST CALLING CARD
GET VOICE MAIL ACCESS #
GET VOICE MAIL ACCESS #
GET ALLOGIT NUMBER ON BILL
GET ADDRESS FOR WRITING TO REEDIRECT.
GET ADDRESS FOR WRITING TO REEDIRECT.
GET ADDRESS FOR WRITING TO REEDIRECT.
OTHER: (POTENTIALLY AUTOMATABLE)
III. DID AGENT DO NON-AUTOMATABLE)
III. DID AGENT ON STATUS OF PENDING ORDER
SALES (PKGS, SERVICES, LINES, JACKS, ETC)
SALES (REMOVE FEATURE- AGENT AKS WHY)
DISCONNECT (AND FORWARD CALLS) OTHER
WAS THIS CALL CODED ABOVE?
DID AGENT SEE CALL AS MISDIRECTED?
DID AGENT TRANSFER THE CALL?
IV. IF TRANSFERRED. TO WHAT DESTINATION?
800-281-8584 MASTER KEY
800-275-2355 REPAIR EXPLAIN BILL
REMOVE UNAUTHORIZED CALL FROM BILL
REMOVE OTHER CHARGES FROM BILL
CONFIRM TODAY'S REPAIR SCHEDULE
SCHEDULE A VISIT WITH REPAIRMAN
TELL HOWWWHEN TO USE FEATURES THEY OV 888-243-9733 TOLL BILLING 800-246-2800 UNLAWFUL CALL SOL CTR 800-585-6127 INSTALLATION HOTLINE 877-525-2375 DSL 800-427-9977 "BUSINESS OFFICE" 800-287-9933 COLLECTION CENTER 800-870-01000 SERVICE SOLUTIONS TELL HOW TO USE FEATURES
WELCOME CENTER
BUSINESS ACCOUNTS NEW SERVICE FOLLOWUP

NERVISOR RANSFER TO SPANISH AGENT AS TRANSFER WARM (AGENT STAYED)? URATION WITH SECOND AGENT? URTHER TRANSFERS? IF YES! OTAL NUMBER OF AGENTS INVOLVED XPLAIN:					
			L	28	
	2		2	2	
			XYZ EXPLAINED THAT LEASING IS ENDED AND THE PHONE ISNT CONNECTED TO HER BILLING NUMBER.	ASSIGNS RATI PLAN, ETC.	
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0 0 0	0	0			
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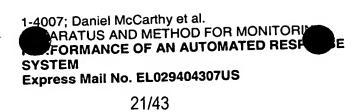
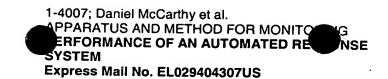


FIG. 6C

FIG. 6C-1	
FIG. 6C-2	
FIG. 6C-3	
FIG. 6C-4	

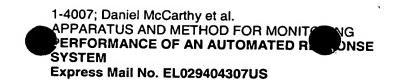
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	22/43			
	A	C	D	E
1	CALL NUMBER	ALL CALLS STATISTICS		
2	TRANSCRIBER			
	DATE:			
	PHONE #:	-		
	SEX OF CALLER:			
	CLOCK TIME (END OF INTERACTION)	 		
	DURATION OF INTERACTION (WHOLE MIN)	5.123042506	0%	
	DURATION OF ENTIRE CALL (WHOLE MIN)	7.548098434	0%	
	WAS THIS A FULLY AUTOMATED CALL?	14	3%	
$\overline{}$	DID CALL INVOLVE AN AGENT?	339	447	
11				
12	IVR SUMMARY: (MENU CHOICES)	0	0%	
13	(USE WORDS: "PHONE #" "RING" "FAST BUSY"	0	0%	
14	"HANG UP" "ROTARY"	0	0%	
15				
	DID CALLER TRY 0 AND FAIL?	30	7%	
	WAS CALL INCOMPLETE (O FUNCTIONS?)	94	21%	
	[IF 1, INDICATE WHICH ONE APPLIES]	0	0%	•
	ABANDON AT START OF IVR (RINGING OR INTRO)	0	0%	
	ABANDON AT PHONE # PROMPT	4	1%	
	ABANDON AT PHONE # PROMPT ABANDON AT CUSTOMER ID PROMPT	2	0%	
		22	5%	
	ABANDON AT PROMPT	22	0%	
	ABANDON WHILE RINGING FOR AGENT			
	ABANDON AT "ALL OUR AGENTS ARE CURRENTLY"	4	1%	
	ABANDON AT FAST BUSY OR SYSTEM BUG	14	3%	
	UNUSUALLY HEAVY CALL VOLUMES	17	4%	
	OTHER:	29	6%	
28	WHERE IN IVR DID THEY ABANDON			
29	1 MASTERKEY	20	4%	
30	2 NEW SERVICE	3	1%	
	3 ADD/CHANGE	13	3%	
	4 BILLING/OTHER	12	3%	
	5 REPAIR	2	0%	
	OTHER	18	4%	
35	VIIILIN			
	[IF CALLER GOT TO AN AGENT, HOW?]	0	0%	
	BY ROTARY PHONE (0 TONES PRESSED)?	62	14%	
3/	DI NUIMNI FRUNCED DACED ON DUONE NIIMDED?	0	0%	
138	BY AUTO TRANSFER BASED ON PHONE NUMBER?			
39	THROUGH INTRODUCTION BY PREVIOUS AGENT?		6%	
40	IN IVR THROUGH IVALID/TIMEOUT?	28		
41	IN IVR, THROUGH A VALID NONZERO TRANSFER?	228		
	BY PRESSING "0"	19		
	OTHER (DIDN'T CATCH IT)	2	0%	
44	INDICATE MENU CHOICES MADE IN IVR	0	0%	
	1. PAY ARRANGMENTS (MASTER KEY)	12	3%	
46	2-1 ORDER NEW SERVICE (WELCOME CENTER)	28		
47	2-2 NEW SERVICE - FOLLOW -UP	37	8%	
	3-1 ADD/ADD	64		
_	3-2 ADD/REMOVE	12		
149				1



_	20140			
	Α	C	D	E
	3-3 DISCONNECT	11	2%	
	4-1 BILLING/PHONE DIRECTORY	1	0%	
	4-2 BILLING/ UNAUTHOURIZED CALLS	11	2%	
	4-3-1 BILLING/OTHER/PAY/MASTER K	3	1%	
	4-3-2 BILLING/OTHER/MASTER KEY	11	2%	
	4-3-3 BILLING/OTHER/OTHER	71	16%	
	5 REPAIR (REPAIR CENTER)	14	3%	
57	1-2 (SPANISH)	1	0%	
	[INDICATE FUNCTIONS COMPLETED IN IVR]	0	0%	
59	PAYMENT CENTER LOCATION	3	1%	
60	PAYMENT CENTER HOURS	0	0%	
61	PAYMENT MAILING ADDRESS	2	0%	
62	ACCOUNT INFORMATION	14	3%	
	ESTABLISH ACCT USING PIN	0	0%	
	PAYMENT ARRANGEMENTS	1	0%	
	ENTER DETAILS OF LAST PAYMENT	0	0%	
_	COPY OF BILL	0	0%	
	ORDER PHONE DIRECTORY	0	0%	
	IDENTIFY UNAUTH CALL	4	1%	
	GET 800 # TO IDENTIFY UNAUTH CALLS-ETC.	3	1%	
70				
71	AGENT CALL SUMMARY: (PROBLEM + SOLUTION)			
72				
73				
74	COULD THIS HAVE BEEN DONE IN MK/TB	24	5%	
75				
	I. DID AGENT PERFORM AUTOMATED FUNCTIONS?	25	6%	
77	[INDICATE WHICH ONES]			
78	PAYMENT CENTER LOCATION	0	0%	
	PAYMENT CENTER HOURS	0	0%	
	PAYMENT MAILING ADDRESS	0	0%	
81	ACCOUNT INFORMATION	9	2%	
	ESTABLISH ACCT USING PIN	0	0%	
	PAYMENT ARRANGEMENTS	5	1%	
	ENTER DETAILS OF LAST PAYMENT	0	0%	
	COPY OF BILL	5	1%	
	ORDER PHONE DIRECTORY	1	0%	
	IDENTIFY ABC UNAUTH CALL	5	1%	
	IDENTIFY XYZ ETC. UNAUTH CALL	0	0%	
89				
	II. DID AGENT DO POTENTIALLY AUTO FUNCTIONS?	16	4%	
	[INDICATE WHICH ONES]			
	FIND TOLL CALL RANGE	8	0%	
	REQUEST CALLING CARD			
	GET VOICE MAIL ACCESS #	3	0%	
_	GET 3+2 DIGIT NUMBER ON BILL	2		
	GET INFO ON RATES-BY MAIL OR SEE DIRECT	0		
	GET ADDRESS FOR WRITING TO REFUTE BILL	0		
<u>(3/</u>	OF I VODIVEOU LOIV MINITING TO IVELOTE DIFF		- 70	

	24/43			
	A	С	D	E
98	OTHER: (POTENTIALLY AUTOMATABLE)	3	0%	
99				
	III. DID AGENT DO NON-AUTOMATED FUNCTIONS?	220	49%	-
	[INDICATE WHICH ONES]			
	PAYMENT ARRANGEMENTS	5	1%	
	NEW SERVICE- EXPLAINS 2 PARTS NEEDED	21	5%	
	NEW SERVICE FOLLOW UP (NOT DISCONNECT)	10	2%	
				
	CHECK ON STATUS OF PENDING ORDER	6	0%	
	SALES (PKGS, SERVICES, LINES, JACKS, ETC)	65	15%	
	SALES (REMOVE FEATURE- AGENT ASKS WHY)	16	4%	
	DISCONNECT (AND FORWARD CALLS)	9	2%	
	EXPLAIN BILL	25	6%	
110	REMOVE UNAUTHORIZED CALL FROM BILL	4	1%	
111	REMOVE OTHER CHARGES FROM BILL	2	0%	
112	CONFIRM TODAY'S REPAIR SCHEDULE	3	1%	
113	SCHEDULE A VISIT WIHT REPAIRMAN	8	2%	
114	TELL HOW/WHEN TO USE FEATURES THEY OWN	12	3%	
	OTHER	34	8%	
	WAS THIS CALL CODED ABOVE?	675	579	
	DID AGENT SEE CALL AS MISDIRECTED?	81	18%	
	DID AGENT TRANSFER THE CALL?	82	18%	
	IV. IF TRANSFERRED, TO WHAT DESTINATION?	0	0%	
	800-281-8584 MASTER KEY		0%	
		12	3%	
	800-275-2355 REPAIR	10	2%	
	800-287-9933 COLLECTION CENTER	0	0%	
	800-870-0000 SERVICE SOLUTIONS	1	0%	
	TPV		2%	
	888-243-9733 TOLL BILLING	9		
	800-246-2800 UNLAWFUL CALL SOL CTR	0	0%	
	800-585-6127 INSTALLATION HOTLINE	11	2%	
	877-525-2375 DSL	2	0%	
129	800-427-9977 "BUSINESS OFFICE"	1	0%	
	DMC	1 1	0%	
131	NEW SERVICE FOLLOWUP	1 1	0%	
	DISCONNECT	1	0%	
	TELL HOW TO USE FEATURES	1	0%	
	WELCOME CENTER	10	2%	
	BUSINESS ACCOUNTS	2	0%	
	ISP CALL/VERIZON ONLINE	2	0%	
	WIRELESS	3	1%	
	DIFFERENT CARRIER	2	. 0%	
	SUPERVISOR	0	0%	
	OTHER	3	1%	
		6	1%	
	TRANSER TO SPANISH AGENT		8%	
	WAS TRANSER WARM (AGENT STAYED)?	34		
	DURATION WITH SECOND AGENT?	663	0.292715232	
	FURTHER TRANSFERS?	14	3%	
145	[IF YES]	 		
1146	TOTAL NUMBER OF AGENTS INVOLVED	205	9%	



	A 25/45	С	D	E
147	<u> </u>		<u> </u>	
	EXPLAIN:			
149	EXI EXIV.			
	TOPIC SUMMARY			
	PAYMENT ARRANGEMENT	10		
	NEW SERVICE	21		+
	ORDER FOLLOW-UP	16		
	SALES-ADD	65		1
	SALES-REMOVE	16		1
	DISCONNECT	9		
157	PHONE DIRECTORY	1		
	IUNAUTHORIZED CALLS	9		
	BALANCE/COPY	14		
	OTHER	89		
	REPAIR	11		
	SPANISH	6		
	REROUTE	-		
164		267		
165				
166				
167			_	
168				-
169				
170	·			
171				
172				
173				
	ROUTING SUMMARY			
	1 OR 4-3-1 PAY ARRANGMENTS (MASTER KEY)			
176	2-1 ORDER NEW SERVICE (WELCOME CENTER)			<u> </u>
	2-2 NEW SERVICE-FOLLOW-UP			
	3-1 ADD/ADD			
	3-2 ADD/REMOVE			
	3-3 DISCONNECT			
181	4-1 BILLING/PHONE DIRECTORY			ļ
182	4-2 BILLING/UNAUTHORIZED CALLS			
183	4-3-2 BALANCE/COPY/LOCATIONS/LAST PAYMENT			
184	4-3-3 OTHER			
185	5 REPAIR (REPAIR CENTER)			
	1-2 (SPANISH)			-
187	ROTARY (INITIAL TIMEOUT)		•	
188	INVALID, TIMEOUT, OR "0" ONCE IN IVR			
189	OTHER (UNKNOWN)			

DATA 20/43	CONCLUSION
1. CUSTOMER ROUTES SELF IN IVR TO WRONG AGENT 2. AGENT TRANSFERS CUSTOMER IN RESPONSE TO CUSTOMER NEED.	MISROUTING (2 OR MORE AGENTS INVOLVED INSTEAD OF 1)
1. CUSTOMER ROUTES SELF IN IVR TO WRONG AGENT	MISROUTING (WRONG AGENT INVOLVED)
2. AGENT PERFORMS FUNCTION ANYWAY.	
1. AGENT PERFORMS FUNCTION. 2. FUNCTION IS AVAILABLE IN IVR.	UNDERUTILIZATION OF IVR FUNCTIONALITY.
1. AGENT PERFORMS FUNCTION 2. FUNCTION NOT CURRENTLY AVAILABLE IN IVR. 3. FUNCTION COULD POTENTIALLY BE ADDED	IVR MISSING CRUCIAL FUNCTIONALITY
1. CUSTOMERS OPTING OUT OF IVR AT FEW POPULAR POINTS. 2. IVR DOES NOT PROMPT FOR ID AT THE POINT.	MISSED OPPORTUNITY FOR AUTOMATED CUSTOMER DATA INPUT
1. AGENT STAYS ON THE LINE DURING TRANSER 2. POLICY DOES NOT ADVOCATE A "WARM TRANSFER"	POSSIBLE POLICY VIOLATION (REGARDING WARM TRANSFERS)
1. AGENT STAYS ON THE LINE DURING TRANSFER 2. TIME ON HOLD WITH CUSTOMER SUGGESTS AGENT NOT USING SPECIAL QUEUE FOR TRANSFER	POSSIBLE POLICY VIOLATION (REGARDING USE OF FAST QUEUE FOR AGENT TRANSFERS)
1. # CUSTOMERS REMAINING SILENT IN IVR 2. PERCENTAGE OF ROTARY USERS KNOWN 3. IF 1 SUBSTANTIALLY EXCEEDS 2	CUSTOMERS REFUSING TO PLAY THE GAME
1. # COSTUMERS COOPERATING IN IVR 2. # CUSTOMERS GETTING READOUT BEFORE ABANDONING IF 1 SUBSTANTIALLY EXCEEDS 2	CUSTOMERS RECEIVING NO BENEFIT FROM IVR THOUGH WILLING TO TRY
1. # CALLS 2. # CALLERS COMPLETING AT LEAST 1 FUNCTIONS IN IVR (INCLUDING GETTING READOUT) AND NOT GOING TO AGENT IF 1 SUBSTANTIALLY EXCEEDS 2	LOW "COMPLETE-SELF-SERVE" RATE

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PER RMANCE OF AN AUTOMATED RESPON
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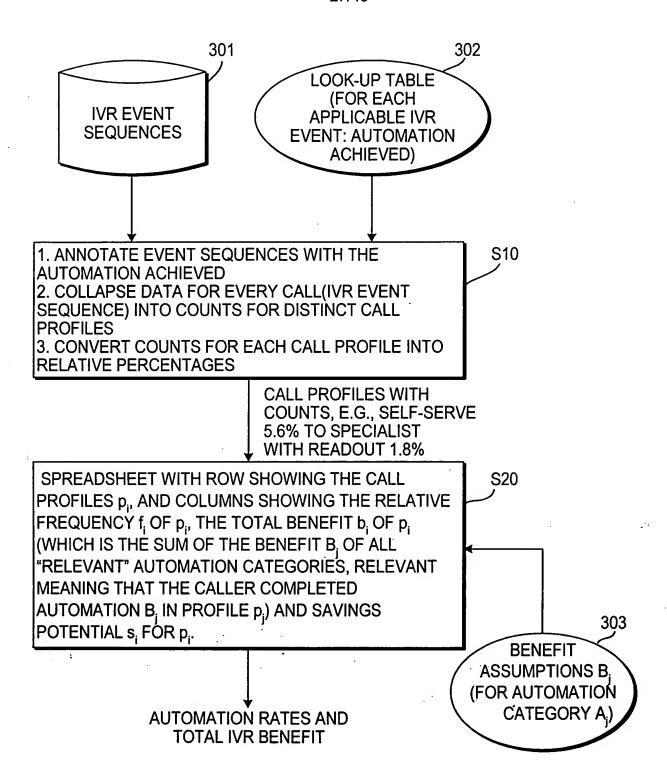


FIG. 7

1-4007; Daniel McCarthy et al.
APPEARMANCE OF AN AUTOMATED RESPONSYSTEM

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CALL PROFILE (P;)	TRAFFIC (fi)	(f)	AUTOMATION (Bji)	۷ (Bji)		BENEFIT (AGENT SECS)	SENT SECS)
	CALLS	% CALLS	CALLS % CALLS ACCOUNT#	ROUTING	ROUTING INFO DELIVERY	ONE CALL	AVERAGE
FULLY-AUTOMATED CALLS	72	2.0%	V	œ	_	105	2.1
TRANSFERS TO SPECIALIST AFTER INFORMATION READOUT	-	%0:0	А	Я	1	105	0.0
TRANSFERS TO FLOOR AFTER INFO READOUT	. 38	1.0%	A		-	55	9.0
TRANSFERS TO SPECIALIST W/ ID	849	23.4%		· &		40	9.3
TRANSFERS TO FLOOR W/ ID	1008	27.7%	Α			15	4.2
TRANSFERS TO FLOOR W/O ID	591	16.3%	•				
MISROUTED TO SPECIALIST W/ ID	389	10.7%	А	ά		-25	-2.7
MISROUTED TO SPECIALIST W/O ID	9	0.2%		ᄷ		-40	-0.1
ABANDONS	681	18.7%			٠		
TOTAL	3636	100.0%	41.5%	14.5%	3.1%		13.4

FIG. 8

1-4007; Daniel McCarthy et al.

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RFORMANCE OF AN AUTOMATED RESULTS
SYSTEM

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AUTOMATION CATEGORY	CALLER IDENTIFICATION ("A")	INFORMATION DELIVERY ("I")	ROUTING ("R")
ASSUMED BENEFIT [AGENT SECS]	15	40	40

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AUTOMATION CATEGORY	_	⊢		V	_		3	0/4: ∀		V	Υ	⋖	۷	۷	۷	-	
SAVINGS	5.9	2.9	0.5	0.0	6.0	0.3	0.4	3.0	0.2	0.1	3.7	2.5	1.6	0.0	0.1	1.1	23.1
FREQUENCY	21.5%	13.7%	2.2%	0.5%	4.4%	1.5%	2.7%	20.5%	%2'0	%2'0	20.0%	16.1%	13.9%	%0:0	1.2%	3.2%	
TIME SPENT	27.31	20.94	22.08	9.48	21.3	21.8	13.5	14.51	24.75	9.22	18.26	15.19	11.72	0	5.29	36.14	
#OCCURRENCES	88	99	တ	2	18	9	11	84	က	က	82	99	22		5	13	409
AUTOMATABLE TRANSACTIONS	ACCOUNT_BALANCE	NEW_PAYMENT_ARRANGEMENT	CURRENT_PAYMENT_ARRANGEMENT	ZIP_CODE	PAYMENT_LOCATION	BALANCED_PAYMENT_PLAN_AMOUNT	RULES_12_AND_22	NEW_APPOINTMENT_DATE_TIME	IS_GAS_APPLIANCE	IS_NOT_GAS_APPLIANCE	NEW_APPOINTMENT_CONFIRMATION_TELEP	NEW_APPOINTMENT_LOCATION	NEW_APPOINTMENT_DOG	NEW_APPOINTMENT_MULTI_OR_SINGLE	NEW_APPOINTMENT_ADULT_PRESENT	APPOINTMENT_DETAILS_CONFIRMATION	TOTAL NUMBER OF ANNOTATED CALLS

7

WEIGHTED OPPORTUNITY: 16.6

%HANDLED BY AGENT 72%

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CUSTOMER CONTACT TYPE	% CALLS	CUSTOMER ID	ROUTING	INFO DELIVERY	TRANSACTION
CUSTOMER SERVICE	8.7%	×			
BALANCE BILLING	36.7%	×	×	×	
PAYMENT ARRANGEMENTS	13.0%	×	×	×	×
PAYMENT OPTIONS	4.0%	×	×	×	
TURN ON	3.0%				
RATES	1.3%		×	×	
STOP SERVICE	3.5%	×			
SERVICE	11.5%	×			
APPOINTMENT	16.5%	×	×	×	×
EMERGENCY	1.8%	×			
TOTAL/UPPER BOUNDS	100.0%	95.7%	71.5%	71.5%	29.5%

HOW TO TRANSFORM UPPER BOUNDS ON AUTOMATION TO AGENT TIME SAVING OPPORTUNITIES: 9 1.8 **우** 28.6 3.575 5 14.355 BENEFIT ASSUMPTION [AGENT SECS PER CALL]

BENEFIT [AGENT SECS] TOTAL OPPORTUNITY

 $95.7\% \times 15 = 14.355$ 58.33

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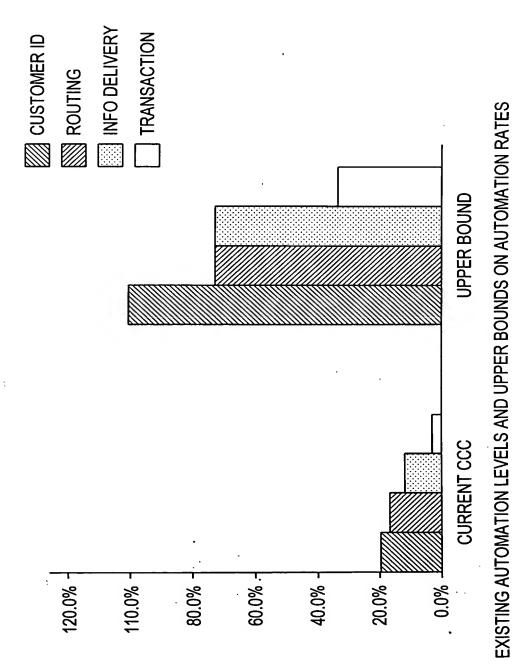
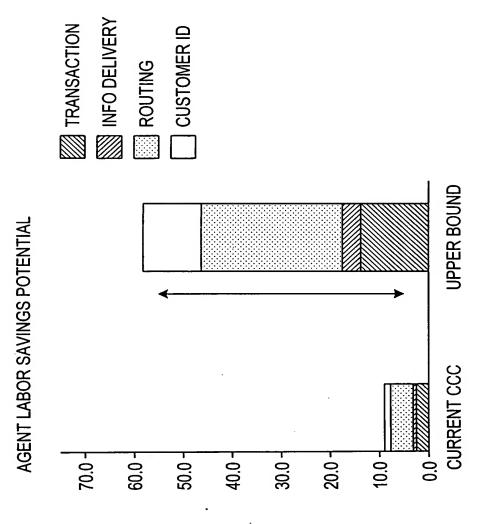


FIG. 12

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PERFORE CE OF AN AUTOMATED RESPONSE
SYSTEM
Express Mail No. EL029404307US



-1G. 13

APPAR IS AND METHOD FOR MONITORING PERFO NCE OF AN AUTOMATED RESPONSE SYSTEM Express Mail No. EL029404307US 34/43 START 4319 (*100.0*, 100.0) DIAGRAM 234 (*5.4*, 5.4) ABANDON "STATE"CORRESPONDS **GREETING** TO ONE OR MORE IVR 311(7.6, 7.2) TO_FLOOR_NEW 4085 INTERACTIONS WITH ACCOUNT (94.6,94.6) CALLER (PROMPT, 186(4.6, 4.3) TO_FLOOR RESPONSE, AND 46(1.1, 1.1) ABANDON OPENING_MENU RESULTING ACTION) THIS ID ENTRY STATE 3542 INCLUDES TIMEOUT AND (86.7,82.0)ERROR RETIRES. 366(*10.3*, 8.5) ABANDON ID_ENTRY BREAKDOWN OF IVR 415 EXIT CONDITIONS (11.7, 9.6)TRANSFERS AND HANGUPS) ALT ID ENTRY 274 (66.0, 6.3) TO_FLOOR 2761(*78.0*,63.9) 82 (19.8. 1.9) ABANDON CALLS FOLLOWING THIS PATH 59(14.2,1.4) AS A PERCENTAGE OF CALLS LEAVING THE STATE 1045(36.4, 24.2) AS A PERCENTAGE OF SPECIALIST_TYPE_1 TOTAL CALLS 105(3.7, 2.4) SPECIALIST_TYPE_2 77(2.7,1.8) SPECIALIST_TYPE_3 3(0.1,0.1)SELF_SERVE 4(0.1,0.1)TO_FLOOR_AFTER_ FIG. 14 READOUT 31(1.1,0.7) TO_FLOOR 74(2.6, 1.7) ABANDON MAIN MENU 966(33.6,22.3) 566(19.7,13.1) 31(*3.2*,0.8)*>* LOOPBACKS OTHER_OPTIONS SUB_MENU 11(1.9,0.3) **IVR IVR** LOOPBACKS **EXITS EXITS** CONTINUATIONS CONTINUATIONS

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PERFECTION AND AUTOMATED RESPONSI SYSTEM
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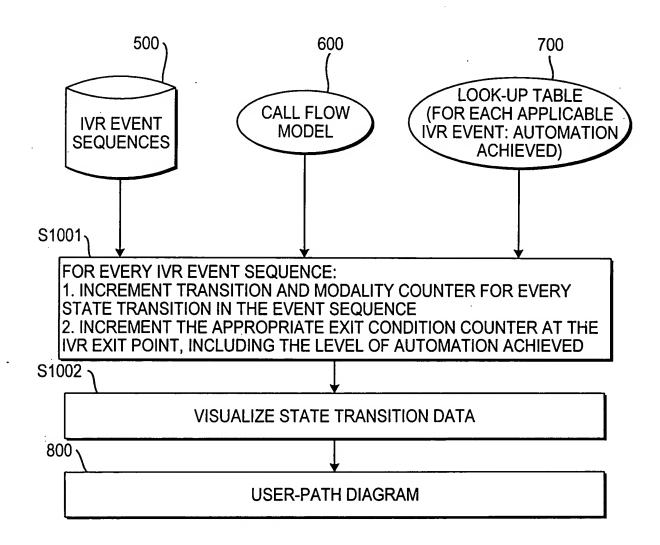
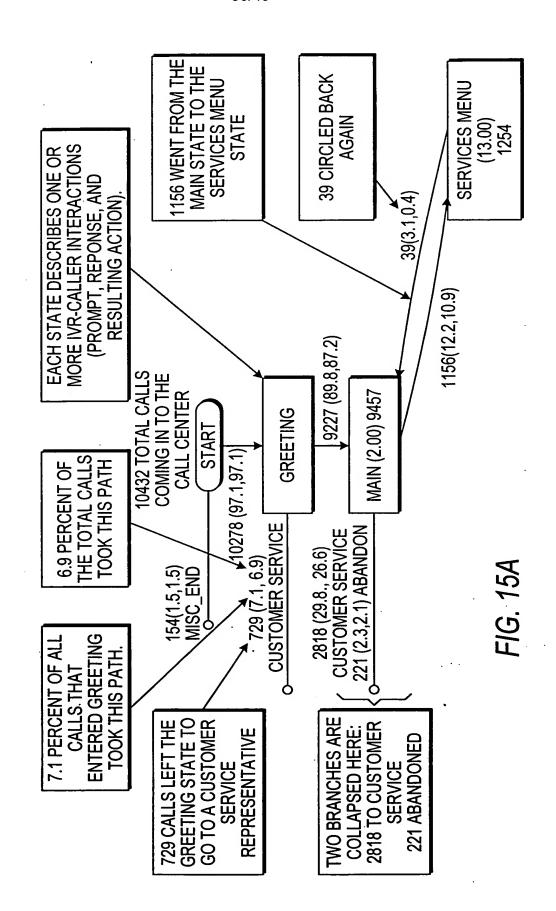


FIG. 15

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Express Mail No. EL029404307US

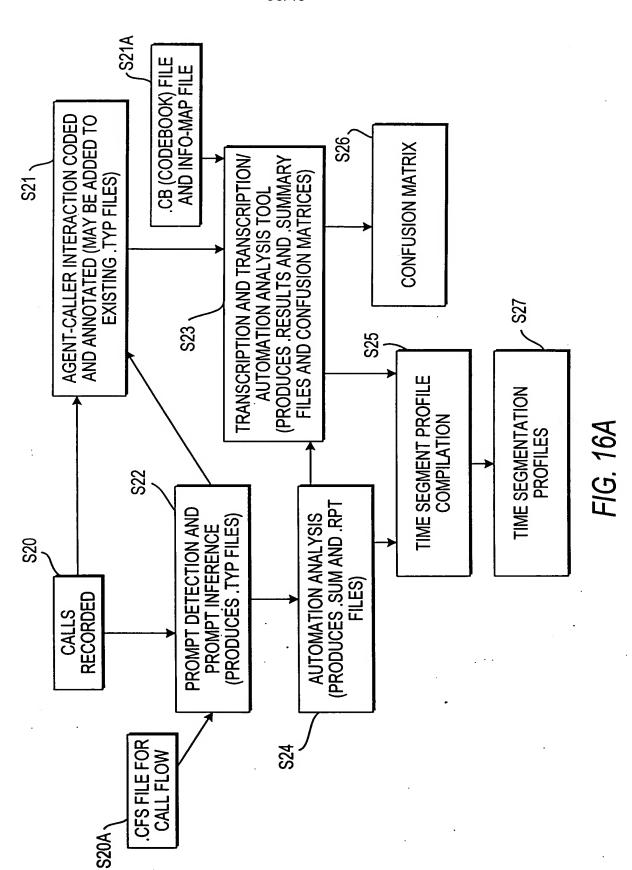
	ROUNS ROUTE		0 24 100%			166 307	54% 100%		OVERALL	
TRUE CALL TYPE (FROM AGENT INTERACTION)	SPECIAL Y.3	16	0	∞	56	20	16%	16%		
ALL TYPE (FRO)	SPECIAL 72.2	0	. 24	2	10	36	12%	%29	·	
TRUE C/	SPECIAL 7.	33	0	0	22	55	18%	%09		
	CALLER'S TT MENU CHOICE	SPECIALTY 1	SPECIALTY 2	SPECIALTY 3	FLOOR	CALLS BY TRUE TOPIC	TOPIC VOLUME	CORRECTLY IDENTIFIED	- ·	

DIAGONAL = CORRECTLY ROUTED OTHERS = MISROUTED

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PETERMANCE OF AN AUTOMATED RESPON
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I	FIRST TOPIC	STRT	PAY-CHG	PAY-MAK	PAY-MAK	ECI	RSTR	ОТН	PAY-MAK	PAY-REV	PAY-MAK	CHNG	PAY-MAK	CHNG	PAY-MAK	PAY-MAK	PAY-MAK	ECI	STRT	BAL	PAY-MAK	PAY-MAK	PAY	ОТН	PAY-MAK	RSTR	RSTR	STRT	PAY-MAK	STRT	PAY-MAK	PAY-MAK	PAY-REV	PAY-MAK	BIL	PAY-MAK
9	FIRST AGENT																																			
<u> </u>	FIRST AGENT																																			
	IVR ROUTING DEST FIRST AGENT FIRST AGENT FIRST TOPIC	TURNON	YMENTX	YMENTX	BALANCEBILLING	BALANCEBILLING	BALANCEBILLING	BALANCEBILLING	CUSTOMERSERVICE	CUSTOMERSERVICE	PAYMENTX	TURNON	PAYMENTX	TURNON	BALANCEBILLING	PAYMENTX	CUSTOMERSERVICE	BALANCEBILLING	TURNON	PAYMENTX	YMENTX	BALANCEBILLING	YMENTX	CUSTOMERSERVICE	CUSTOMERSERVICE	APPOINTMENT	CUSTOMERSERVICE	TURNON	CUSTOMERSERVICE	RATES	CUSTOMERSERVICE	YMENTX	YMENTX	PAYMENTX	BALANCEBILLING	CUSTOMERSERVICE
D .	IVR INFORMATION INF	RULES_12_AND_22_READOUT TU	CALLING_FROM_SERVICE_LOCATION, CONFIRM_ADDR PAYMENTX	CALLING_FROM_SERVICE_LOCATION, TELEPHONE, CO PAYMENTX	CALLING_FROM_SERVICE_LOCATION,CONFIRM BA	BA	BA	CALLING_FROM_SERVICE_LOCATION, TELEPHONE BA		nol	CATION, CONFIRM_ADDR	_	CATION, CONFIRM_ADDR	RULES_12_AND22_READOUT TU	BA	CALLING_FROM_SERVICE_LOCATION,CONFIRM_ADDR PA		CATION, TELEPHONE, CO		CALLING_FROM_SERVICE_LOCATION, TELEPHONE PA	CALLING_FROM_SERVICE_LOCATION, CONFIRM_ADDR PAYMENTX	CALLING_FROM_SERVICE_LOCATION, TELEPHONE BA	CALLING_FROM_SERVICE_LOCATION, TELEPHONE, CO PAYMENTX	no)		AP	no	RULES_12_AND_22_READOUT		RULES_12_AND_22_READOUT RA	no)	CALLING_FROM_SERVICE_LOCATION, CONFIRM_ADDR PAYMENTX	CALLING_FROM_SERVICE_LOCATION,CONFIRM_ADDR PAYMENTX	CALLING_FROM_SERVICE_LOCATION,TELEPHONE PA	BA	no
S	IVR ROUTING	P-AGT_STARTHOMESERVICE		P-AGT_NEWPAYMENTARRAN	P-AGT_XFERFROMTELEPHON	P-AGT_CSRFROMBILLING	P-AGT_CSRFROMBILLING		P-AGT_CSRFROMMAIN	P-AGT_CSRFROMMAIN	IRMA		1	P-AGT_STARTCLEANANDSHO	P-AGT_CSRFROMBILLING	P-AGT_CSRFROMNEWPAY	CSRFROMMAIN	ATE		P-AGT_XFERFROMTELEPHON	P-AGT_NEWPAYMENTARRAN	P-AGT_XFERFROMTELEPHON	P-AGT_XFERFROMCONFIRMA	P-AGT_CSRFROMMAIN	P-AGT_CSRFROMMAIN	P-AGENT-ID-MAKE-APPOINTM	P-AGT_CSRFROMMAIN	P-AGT_STARTHOMESERVICE	P-AGT_CSRFROMMAIN	P-AGEND-MAIL_ELEC_R	P-AGT_CSRFROMMAIN	P-AGT_REFUSEDNEWPAY M	P-AGT_INCORRECTNOCURRE	P-AGT_XFERFROMTELEPHON	P-AGT_CSRFROMBILLING	P-AGT_CSRFROMMAIN
8	IVR EXIT	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE	INCOMPLETE
A	1 FILENAME	2 IDAMITRANS/	3 /D4M/TRANS/	4 I/D4M/TRANS/	5 /DAM/TRANS/	6 /D4M/TRANS/	7 /D4M/TRANS/	8 /D4M/TRANS/		10 /D4M/TRANS/	11 /DAM/TRANS/	12 /D4M/TRANS/	13 /D4M/TRANS/	14 /DAM/TRANS/	15 /D4M/TRANS/	16 /D4M/TRANS/		18 /D4M/TRANS/	19 /D4M/TRANS/	20 /D4M/TRANS/		22 /DAM/TRANS/		24 /DAM/TRANS/	25 IDAM/TRANS/	26 /D4M/TRANS/	27 /D4M/TRANS/	28 /DAM/TRANS/	29 /D4M/TRANS/	30 /DAM/TRANS/	31 /D4M/TRANS/	32 /D4M/TRANS/	33 /D4M/TRANS/	34 /D4M/TRANS/	35 /D4M/TRANS/	36 I/D4M/TRANS/

FIG. 1

1-4007; Daniel McCarthy et al.
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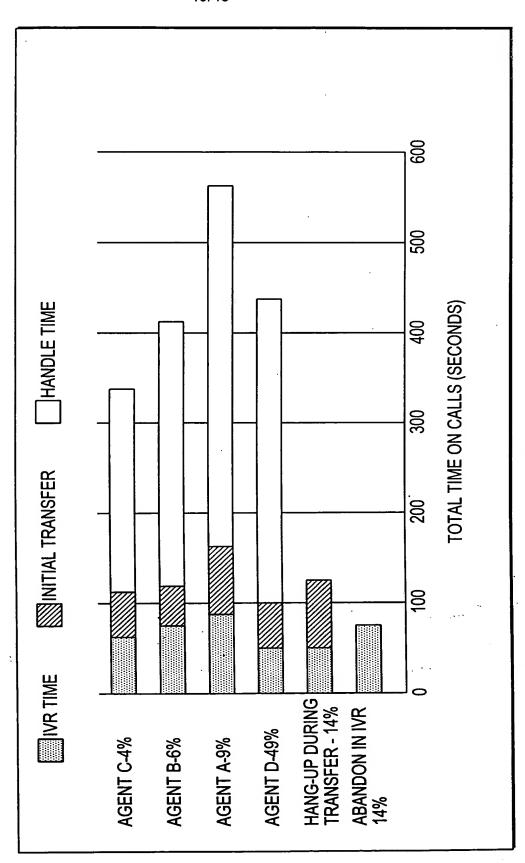


FIG. 18

1-4007; Daniel McCarthy et al.
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PHORMANCE OF AN AUTOMATED RESPONSITEM

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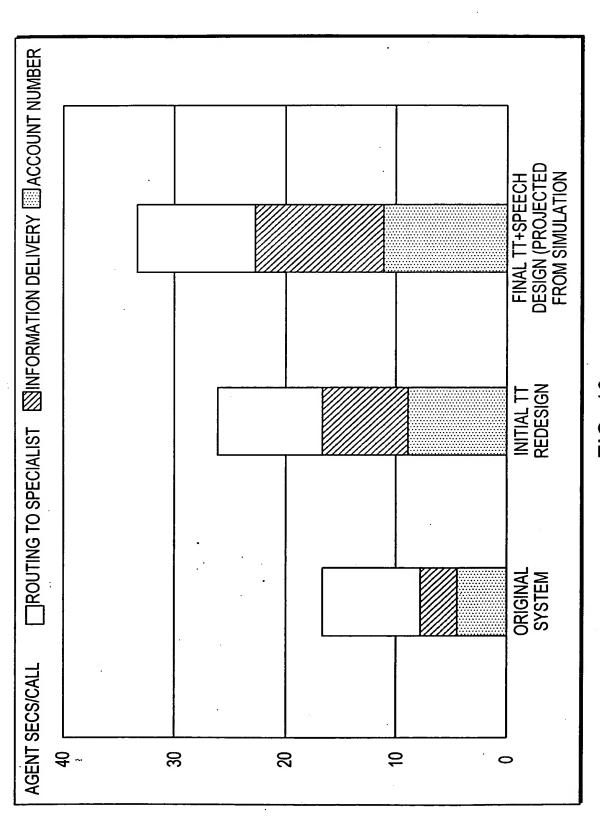


FIG. 19

SYSTEM

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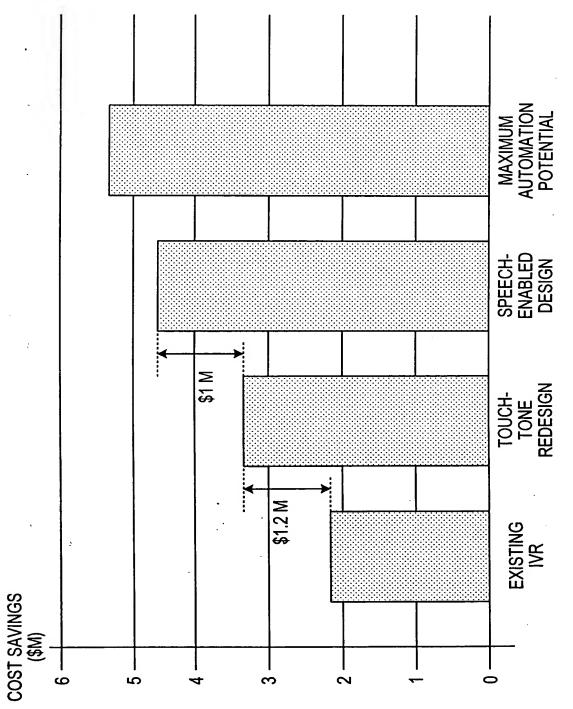


FIG. 19A

1-4007; Daniel McCarthy et al.
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